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10/526,596	03/04/2005	Mikael Haeffner	P/1830-13	5789

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EXAMINER

GREEN, ANTHONY J

ART UNIT PAPER NUMBER

1755

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/526,596

Applicant(s)

HAEFFNER ET AL.

Examiner

Anthony J. Green

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/04/05
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Response to Preliminary Amendment***

1. The preliminary amendment has been entered. Claims 1-7 are currently pending.

### ***Specification***

2. The disclosure is objected to because of the following informalities: The specification makes reference to the claims in numerous instances which is not proper. Applicant needs to remove the reference to the claims.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of certain biologically active substances, does not reasonably provide enablement for the use of every biologically active substance known to man. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

The claims recite a biologically active substance chosen to be decomposable in the presence of water and to consume oxygen during its decomposition process so as to generate an oxygen lean aqueous environment in the water exposed paint layer.

This encompasses any biologically active substance that decomposes in water.

However the specification only teaches the use of certain compounds that meet this property. Such a limited disclosure does not support the breadth of the instant claims.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 it is unclear as to whether or not the phrase "self-polishing" refers to both the term antifouling and the phrase "boat bottom". The phrase "in the presence of water" is vague and indefinite as it is unclear as to what this means. Does this mean that the composition is in water or near water? Clarification is requested. The phrase "the water-exposed paint layer" lacks proper antecedent basis.

In claim 2 the phrase "the surface" lacks proper antecedent basis.

In claim 3 it is unclear as to what is meant by the phrase "includes a material or biological origination".

In claim 5 the phrase "the paint composition" lacks proper antecedent basis.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT International Application No. WO 00/77102.

The reference teaches a self polishing paint comprising a binder and a biologically active substance. See the claims (especially 1 and 12). Page 24 lists the types of biologically active substances that are useable in the composition.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an inherent property in the biologically active substance of the reference absent evidence showing otherwise.

9. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT International Application No. WO 00/77103.

The reference teaches a self polishing paint comprising a binder and a biologically active substance. See the claims (especially 1 and 25). Page 31 lists the types of biologically active substances that are useable in the composition.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an

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inherent property in the biologically active substance of the reference absent evidence showing otherwise.

10. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT International Application No. WO 01/94479.

The reference teaches a self polishing paint comprising a binder and a biologically active substance. See the claims (especially 1 and 14). Page 25 lists the types of biologically active substances that are useable in the composition.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an inherent property in the biologically active substance of the reference absent evidence showing otherwise.

11. Claims 1, 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application No. 244688A2.

The reference teaches, on page 14, lines 8+, the use of a composition comprising a bioadhesive polyphenolic protein and mussel adjuvant protein as an anti-fouling coating.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an inherent property in the mussel adjuvant protein of the reference absent evidence showing otherwise.

12. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent Specification No. 19836076A1.

The reference teaches, in the abstract, an antifouling coating composition comprising a degradable gel matrix and a proteinaceous gel former. The gel former consists of two different proteins.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an inherent property in the protein gel former of the reference absent evidence showing otherwise.

13. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamade et al (US Patent No. 5,770,188).

The reference teaches, in the examples and the claims, an antifouling paint composition comprising a lipid coated enzyme and a paint resin.

The instant claims are met by the reference. It is the position of the examiner that the properties of the biologically active substance recited in the instant claims is an inherent property in the enzyme of the reference absent evidence showing otherwise.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Specification No. 869159 A1.

The reference teaches, in the abstract and the claims, a paint formulation comprising a binder, a solvent, proteinaceous material etc.

The instant claims are obvious over the reference. While the reference does not recite that the composition is for an self-polishing antifouling paint it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d. 2109, 169 USPQ 226 (CCPA 1971).

Accordingly the instant claims are obvious over the reference absent evidence showing otherwise.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over PCT International Application No. WO 00/77102, 00/77103, & 01/94479.



The references were discussed previously.

Applicant recites in the instant specification that it photosynthesis inhibitors are known to be compatible with known self-polishing antifouling paints. Accordingly one of ordinary skill in the art would have found it obvious to incorporate a photosynthesis inhibitor into the self-polishing antifouling paints of the references without producing any unexpected results and thus arrive at the instant invention.


***References Cited By The Examiner***

17. The remaining references cited have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Anthony J. Green  
Primary Examiner  
Art Unit 1755

ajg  
April 28, 2006